Section 1: Product and Company Identification
Product Name: Para-Tissuer, Fro-Tissuer
Use for preparation: Mounting pen for sample tissue
Synonym: Paraffin Pen/ Pen for Frozen Sections, Adhesive Pen for Paraffin and Frozen Sections
Manufacturer: Proprietary
Company Name
Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477
Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day
CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification
The product in its finished form is a liquid contained within a solid marker body designed for a controlled release. Under normal conditions of use, the product does not constitute a risk to health or safety and this document reflects only the hazards associated with the liquid contained within the marker. Additionally, industrial workplace exposure to the product is not consistent with exposure experienced by consumers or office workers. The requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 29 CFR 1910.1200 differ from the labeling requirements of the Consumer Product Safety Commission (CPSC) and as a result, this document may contain additional health hazard information not pertinent to consumer use and not found on the product label.

GHS Pictograms for fluid in Pen, 1-Butanol:

Signal word: Danger
GHS Categories:
**Hazard statement(s)** for fluid in Pen: 1-Butanol
Flammable liquids (Category 3), H226
Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3), Respiratory system, Central nervous system, H335, H336

**Precautionary statement(s)** for fluid in Pen: 1-Butanol
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. 
P264 Wash skin thoroughly after handling. 
P270 Do not eat, drink or smoke when using this product. 
P271 Use only outdoors or in a well-ventilated area. 
P280 Wear protective gloves/ eye protection/ face protection. 
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. 
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. 
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. 
P332 + P313 If skin irritation occurs: Get medical advice/ attention. 
P362 Take off contaminated clothing and wash before reuse. 
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. 
P403 + P233 Store in a well-ventilated place. Keep container tightly closed. 
P403 + P235 Store in a well-ventilated place. Keep cool. 
P501 Dispose of contents/ container to an approved waste disposal plant

**Health Effects:** For fluid in Pen: Acute toxicity matter, Flammable. Harmful by inhalation and in contact with skin. Irritating to skin and eye. 

**For fluid in Pen:** 
Hazard Rating: Health: 2; Fire: 3; Reactivity: 0  
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: 
PBT: NA 
vPvB: NA

Emergency overview 
Appearance: Pen 
Immediate effects: ND 

**Potential health effects** 
Primary Routes of entry: ND 
Signs and Symptoms of Overexposure: See hazard statements for 1-Butanol 
Eyes: See hazard statements 
Skin: See hazard statements 
Ingestion: See hazard statements 
Inhalation: See hazard statements 
Chronic Exposure: Not likely to occur with Pen 
Chemical Listed As Carcinogen Or Potential Carcinogen: None listed 
See Toxicological Information (Section11) 

**Potential environmental effects** 
See Ecological Information (Section 12)
Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</th>
<th>%</th>
<th>OSHA PEL mg/m³</th>
<th>ACGIH TLV mg/m³</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Butanol (71-36-3) EC-No.: 200-751-6</td>
<td>92</td>
<td>20 PPM</td>
<td>50 PPM</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Other ingredients, Trade Secret</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

If accidental overexposure is suspected
Eye(s) Contact: Immediately flush eyes with plenty of water for at least 15 minutes - call a physician
Skin Contact: Wash off with soap and water. Remove contaminated clothes.
Inhalation: Fresh air - call a physician
Ingestion: Rinse out mouth with water - no induce vomiting - call a physician

Note to physician
Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: ND
Flammable Limits: ND
Auto-ignition point: ND
Fire Extinguishing Media: Dry powder, foam, carbon dioxide.
Special Fire Fighting Procedures: ND
Unusual Fire and Explosion Hazards: ND
Hazardous combustion products: ND
DOT Class: Article

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Protect hand with glove and wipe it off with a waste and alcohol.
Waste Disposal Methods: Collect in the container which can be sealed.
Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be taken in Handling and Storage: Not above 40°C or more.
Contact with pen fluid:
Handling: Prevent touching skin, eyes, mucous membrane, clothes.
Work place must be ventilated enough.
Storage: Keep tightly closed, store in a well ventilated place.
Avoid fire and direct rays of the sun.
Storage temperature: Room Temperature. Not above 40°C or more.
Storage Pressure: NA
**Section 8: Exposure Controls / Personal Protection**

**Engineering Controls**
Content fluid - Exposure limits: 50ppm (ACGIH2005)
Ventilation required: Use in a well-ventilated place. Avoid prolonged breathing of vapor

**Personal Protection Equipment**
Respiratory protection: if necessary use mask for vapor of organic compounds, respiratory protection,
Protective gloves: latex or chemical resistant gloves if necessary.
Skin protection: ND
Eye protection: Eye protection Goggles or face-shield if necessary.
Additional clothing and/or equipment: ND

**Exposure Guidelines**
See Composition/Information on Ingredients (Section 3)

**Section 9 Physical and Chemical Properties**
Appearance and Physical State: liquid colorless
Odor (threshold): vinous (slight)
Specific Gravity (H2O=1): 0.810
Vapor Pressure (mm Hg): 0.6 kPa(20°C)
Vapor Density (air=1): ND
Percent Volatile by volume: ND
Evaporation Rate (butyl acetate=1): ND
Boiling Point: 78°C
melting point: -90°C
Freezing point / melting point: ND
pH: 7
Solubility in Water: 77g/L (20°C) water solvent solubility: Soluble
Molecular Weight: NA

**Section 10: Stability and Reactivity**
Stability: Stable under normal conditions.
Conditions to Avoid: Avoid contact with combustive substances.
Materials to Avoid (Incompatibility): Avoid strong oxidizing agents.
Hazardous Decomposition Products: None.
Hazardous Polymerization: None.

**Section 11: Toxicological Information**
Content fluid - ingestion: 1227 mg/Kg
Results of component toxicity test performed: ND
Human experience: ND
This product does not contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

**Section 12: Ecological Information**
Ecological Information: ND
Chemical Fate Information: ND

**Section 13 Disposal Considerations**
Observe all state and local environmental regulations regarding waste disposal.
RCRA 40 CFR 261 Classification: ND
Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.
Section 14: Transportation Information
Do not drop from the places more than 1m, pen body will be damaged.
Do not put in the places 40°C or more.

US DOT Information: Proper shipping name: Not regulated
IATA: Proper shipping name: Not regulated
Marine Pollutant: No
Canadian TDG: Not regulated

Section 15: Regulatory Information
Depends on the laws and ordinances of each country

United States Federal Regulations
SARA:
SARA Title III: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
The following components are subject to reporting levels established by SARA Title III, Section 313:
- n-Butanol, CAS-No. 71-36-3 Revision Date: 2007-07-01
RCRA: ND
TSCA: ND
CERCLA: ND

State Regulations
California Proposition 65: None listed

International Regulations
Canada WHMIS: ND
Europe EINECS Numbers: ND

Section 16: Other Information
Label Information: ND
European Risk and Safety Phrases: ND
European symbols needed: ND
Canadian WHMIS Symbols: ND

Abbreviations used in this document
NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

Disclaimer
Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

MSDS Form 0013F1 V3